WHAT IS CLAIMED IS:

1.   A method of determining a potential of a diabetic patient to benefit anti oxidant therapy for treatment of a vascular complication, the method comprising determining a haptoglobin phenotype of the diabetic patient and thereby determining the potential of the diabetic patient to benefit said anti oxidant therapy, whereby a patient having a haptoglobin 2/2 phenotype benefits anti oxidant therapy more than a patient having a haptoglobin 1/2 phenotype or a patient having a haptoglobin 1/1 phenotype.

2.   The method of claim 1, wherein the vascular complication is selected from the group consisting of a microvascular complication and a macrovascular complication.

3.   The method of claim 2, wherein the vascular complication is a macrovascular complication selected from the group consisting of diabetic nephropathy, myocardial infarction and coronary angioplasty associated restenosis.

4.   The method of claim 2, wherein the vascular complication is diabetic retinopathy.

5.   The method of claim 2, wherein said vascular complication is selected from the group consisting of fewer coronary artery collateral blood vessels and myocardial ischemia.

6.   The method of claim 1, wherein said determining said haptoglobin phenotype is effected by determining a haptoglobin genotype of the diabetic patient.

7.   The method of claim 6, wherein said step of determining said haptoglobin genotype of the diabetic patient is effected by a method selected from the group consisting of a signal amplification method, a direct detection method and detection of at least one sequence change.

8.   The method of claim 7, wherein said signal amplification method amplifies a molecule selected from the group consisting of a DNA molecule and an RNA molecule.

9.   The method of claim 7, wherein said signal amplification method is selected from the group consisting of PCR, LCR (LAR), Self-Sustained Synthetic Reaction (3SR/NASBA) and Q-Beta (Qβ) Replicase reaction.

10.   The method of claim 7, wherein said direct detection method is selected from the group consisting of a cycling probe reaction (CPR) and a branched DNA analysis.

11.   The method of claim 7, wherein said detection of at least one sequence change employs a method selected from the group consisting of restriction fragment length polymorphism (RFLP analysis), allele specific oligonucleotide (ASO) analysis, Denaturing/Temperature Gradient Gel Electrophoresis (DGGE/TGGE), Single-Strand Conformation Polymorphism (SSCP) analysis and Dideoxy fingerprinting (ddF).

12.   The method of claim 1, wherein said determining said haptoglobin phenotype is effected by directly determining the haptoglobin phenotype of the diabetic patient.

13.   The method of claim 12, wherein said determining said haptoglobin phenotype is effected by an immunological detection method.

14. The method of claim 13, wherein said immunological detection method is selected from the group consisting of a radio-immunoassay (RIA), an enzyme linked immunosorbent assay (ELISA), a western blot, an immunohistochemical analysis, and fluorescence activated cell sorting (FACS).

15. A method of determining the importance of reducing oxidative stress in a diabetic patient so as to prevent diabetes associated vascular complications, the method comprising the step of determining a haptoglobin phenotype of the diabetic patient, thereby determining the importance of reducing the oxidative stress in the specific dibetic patient, whereby said importance in higher in a patient having a haptoglobin 2/2 phenotype than a patient having a haptoglobin 1/2 phenotype or a patient having a haptoglobin 1/1 phenotype.

16. The method of claim 15, wherein the vascular complication is selected from the group consisting of a microvascular complication and a macrovascular complication.

17. The method of claim 16, wherein the vascular complication is a macrovascular complication selected from the group consisting of diabetic nephropathy, myocardial infarction and coronary angioplasty associated restenosis.

18. The method of claim 16, wherein the vascular complication is diabetic retinopathy.

19. The method of claim 16, wherein said vascular complication is selected from the group consisting of fewer coronary artery collateral blood vessels and myocardial ischemia.

20.   The method of claim 15, wherein said step of determining said haptoglobin phenotype is effected by determining a haptoglobin genotype of the diabetic patient.

21.   The method of claim 15, wherein said step of determining said haptoglobin genotype of the diabetic patient is effected by a method selected from the group consisting of a signal amplification method, a direct detection method and detection of at least one sequence change.

22.   The method of claim 21, wherein said signal amplification method amplifies a molecule selected from the group consisting of a DNA molecule and an RNA molecule.

23.   The method of claim 21, wherein said signal amplification method is selected from the group consisting of PCR, LCR (LAR), Self-Sustained Synthetic Reaction (3SR/NASBA) and Q-Beta (Qβ) Replicase reaction.

24.   The method of claim 21, wherein said direct detection method is selected from the group consisting of a cycling probe reaction (CPR) and a branched DNA analysis.

25.   The method of claim 21, wherein said detection of at least one sequence change employs a method selected from the group consisting of restriction fragment length polymorphism (RFLP analysis), allele specific oligonucleotide (ASO) analysis, Denaturing/Temperature Gradient Gel Electrophoresis (DGGE/TGGE), Single-Strand Conformation Polymorphism (SSCP) analysis and Dideoxy fingerprinting (ddF).

26. The method of claim 15, wherein said step of determining said haptoglobin phenotype is effected by directly determining the haptoglobin phenotype of the diabetic patient.

27. The method of claim 26, wherein said step of determining said haptoglobin phenotype is effected by an immunological detection method.

28. The method of claim 27, wherein said an immunological detection method is selected from the group consisting of a radio-immunoassay (RIA), an enzyme linked immunosorbent assay (ELISA), a western blot, an immunohistochemical analysis, and fluorescence activated cell sorting (FACS).